Federal Communications Commission

FCC MAIL SECTION

Before the Fold and Commission Washington, D.C. 20554

In the Matter of	DISPATOHED BY)	
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Amendment of Parts 2 and 15 of the)	
Commissions Rules to Further Ensure)	ET Docket 98-76
That Scanning Receivers Do Not)	
Receive Cellular Radio Signals)	
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REPORT AND ORDER (Proceeding Terminated)

Adopted: March 25, 1999 Released: March 31, 1999

By the Commission:

INTRODUCTION

1. By this action, the Commission amends Parts 2 and 15 of its rules to strengthen, improve and clarify regulations prohibiting scanning receivers from receiving transmissions from the Cellular Radiotelephone Service ("Cellular Service"). Specifically, we adopt rules that require scanning receivers to include adequate filtering so that they do not pick up Cellular Service transmissions even when tuned to frequencies outside those allocated to the Cellular Service. In addition, we amend the rules to require that scanning receivers be designed so that their tuning control and filtering circuitry are not easily accessible and that any attempts to modify the scanning receiver to receive Cellular Service transmissions will likely render the scanning receiver inoperable. We modify our rules to require that a label be affixed to scanning receivers to indicate that modification of the receiver to receive Cellular Service transmissions is a violation of FCC rules and Federal law. Moreover, we modify the definition of a scanning receiver to clarify which types of equipment are covered by these rules. We also clarify our rules prohibiting the modification of scanning receivers. Finally, we prohibit the importation and manufacture of scanning receivers and frequency converter kits capable of receiving and decoding signals from the Cellular Service frequency bands.

BACKGROUND

2. On October 28, 1992, the *Telephone Disclosure and Dispute Resolution Act* (the "TDDRA") was signed into law.² The Commission subsequently initiated a rule making proceeding, ET Docket 93-1, to enact rules that satisfy the mandates specified in the TDDRA.³ In that proceeding, the Commission adopted rules that prohibit the manufacture and importation of scanning receivers that are

¹ The Commission's regulations regarding the Cellular Radiotelephone Service are set forth in Part 22 of the FCC rules, 47 C.F.R. Part 22, Subpart H. Cellular telephones use frequencies in the 824-849 MHz and 869-894 MHz bands to connect mobile users to other cellular system users and to the Public Switched Telephone Network.

² See Pub. L. 102-556.

³ See Notice of Proposed Rule Making in ET Docket 93-1, 8 FCC Rcd 359 (1993), Report and Order in ET Docket 93-1, 9 FCC Rcd 2911 (1993), Memorandum Opinion and Order in ET Docket 93-1, 9 FCC Rcd 3386 (1994).

capable of receiving transmissions in the frequencies allocated to the Cellular Service; prohibit the manufacture and importation of scanning receivers that can be readily altered to receive transmissions from the Cellular Service; and prohibit scanning receivers from being equipped with decoders that convert digital cellular transmissions to analog voice audio.⁴ These requirements were adopted to ensure the privacy of communications in the Cellular Service. In order to ensure compliance with these regulations, scanning receivers must be authorized (certificated) by the Commission before they may be imported or marketed.⁵

- 3. On May 21, 1998, the Commission adopted a Notice of Proposed Rule Making ("Notice") in ET Docket 98-76, to further ensure that scanning receivers do not receive Cellular Service signals.⁶ This was in response to a petition for rule making filed by Uniden America Corporation ("Uniden") which proposed an image rejection of 38 dB for scanning receivers and a requirement to make tuning and control circuitry of scanning receivers inaccessible.⁷ As explained in the Notice, the Commission believes its rules generally have been successful in preventing the manufacture and importation of scanning receivers that can tune Cellular Service frequencies directly.⁸ The Commission recognized, however, that the current rules have not been completely effective. In order to ensure continued compliance with both the requirements and intent of the TDDRA, the Commission proposed additional rule changes in the Notice to establish standards to prevent scanning receivers from receiving Cellular Service transmissions under typical operating conditions, and to strengthen and expand the Commission's regulations to ensure that the objectives of our rules governing scanning receivers are not thwarted.⁹
- 4. Scanning receiver equipment manufacturers generally support the proposals contained in the *Notice* with a few exceptions, as noted below. Cellular Service providers also generally support the proposals contained in the *Notice*, and urge the Commission to take additional steps to ensure the privacy of its subscribers. Most individual commenters believe that the proposals contained in the *Notice* are not needed, and they are concerned that the proposals will do little to stop the modification of scanning receivers to receive Cellular Service transmissions. Further, individuals contend that the proposed rules will harm lawful scanning receiver users by increasing the cost of purchasing, maintaining, and repairing scanning receivers.¹⁰
- 5. We have carefully considered all of the comments received in this proceeding and are adopting rules that will further ensure the privacy of licensed Cellular Service communications. In doing so, we recognize that there are many beneficial and lawful uses for scanning receivers, such as monitoring police, fire and rescue transmissions, obtaining weather notifications, sporting event

⁴ See 47 C.F.R. § 2.1033, § 15.37, and § 15.121.

⁵ See 47 C.F.R. § 15.101(a) and § 2.1031 et seq.

⁶ See Notice of Proposed Rule Making in ET Docket 98-76, 13 FCC Rcd 12937 (1998).

⁷ See Petition for Rulemaking Regarding Radio Scanner Receivers (RM-9022) dated February 3, 1997, and Comments On Petition for Rulemaking dated March 10, 1997, filed by Uniden America Corporation.

⁸ See Notice at para. 4.

⁹ *Id*.

¹⁰ See Appendix A for the list of parties that filed comments and reply comments.

communications, and disaster communications. The Commission's rules will allow continued consumer availability of these valuable devices.

DISCUSSION

Definitions

6. The Commission's rules currently define a scanning receiver as follows:

Scanning Receiver. For the purpose of this part, this is a receiver that automatically switches among four or more frequencies in the range of 30 to 960 MHz and which is capable of stopping at and receiving a radio signal detected on a frequency. Receivers designed solely for the reception of the broadcast signals under part 73 of this chapter or for operation as part of a licensed station are not included in this definition.¹¹

In the *Notice*, the Commission sought comment on whether the current scanning receiver definition needed to be modified to include receivers that automatically switch among fewer than four frequencies, as well as receivers that can be manually tuned.¹² In addition, the Commission sought comment on the need to modify the current scanning receiver definition to include Cellular Service mobile equipment that can be programmed by the user to perform as a scanning receiver.¹³

7. The Consumer Electronics Manufacturers Association ("CEMA") urges the Commission to give careful consideration to any change in the definition of a scanning receiver. Specifically, CEMA is concerned that any definition change might inadvertently affect other radio products. The American Radio Relay League, Incorporated ("ARRL") requests that we exempt Amateur Radio Service transceivers that contain scanning receivers because the equipment is used in the operation of a licensed station. The Cellular Telephone Industry Association ("CTIA") and AT&T Wireless Services, Inc., ("AWS") urge the Commission to adopt the definition of a scanning receiver contained in the Wireless Telephone Protection Act ("WTA") for consistency with the Criminal Code. The WTA defines a scanning receiver as follows:

scanning receiver means a device or apparatus that can be used to intercept a wire or electronic communication in violation of chapter 119 or to intercept an electronic serial number, mobile identification number, or other identifier of any telecommunication service, equipment, or instrument.

¹¹ See 47 CFR § 15.3(v).

¹² See Notice at para. 15.

¹³ See Notice at para. 16.

¹⁴ See Comments of the Consumer Electronics Manufacturers Association at page 4.

¹⁵ See Comments of the American Radio Relay League, Incorporated at pages 13-14.

See P.L. 105-172 at Section 2(c). See Comments of the Cellular Telecommunications Industry Association at pages 2-3. See Comments of AT&T Wireless Services, Inc., at pages 6-7.

Grove Enterprises, Inc., ("Grove") notes that those wishing to tune Cellular Service frequencies can exploit the built-in test modes contained in cellular telephones just as they can use other scanning receivers to tune Cellular Service frequencies.¹⁷ Therefore, Grove does not believe that there is any reason to differentiate between cellular telephones used in a licensed service and other receiving devices.

8. We find that modifying our definition to include scanning receivers that scan two or more frequencies will deter the manufacture of scanning receivers that automatically scan less than four frequencies in order to circumvent our rules. We adopt a modified definition of a scanning receiver to read as follows:

Scanning Receiver. For the purpose of this part, this is a receiver that automatically switches among two or more frequencies in the range of 30 to 960 MHz and that is capable of stopping at and receiving a radio signal detected on a frequency. Receivers designed solely for reception of the broadcast signals under Part 73 of this chapter or for operation as part of a licensed station are not included in this definition.

We find that use of the WTA definition in this context could lead to anomalous results. The primary purposes of this rule making are to ensure that scanning receivers are difficult to modify and do not receive Cellular Service transmissions on image frequencies. Electronic serial number readers and other devices encompassed within the WTA definition do not need to be modified to pick up Cellular Service transmissions, nor would tuning such devices to image frequencies serve any purpose. Thus, we find that the narrower definition of scanning receivers for the purposes of this rule making is preferable to the approach suggested by CTIA and AWS. With regard to ARRL's request, we note that, as under the current definition, Amateur Radio Service receivers, like receivers used in conjunction with other licensed radio services, do not fall under the definition of a scanning receiver in 47 CFR § 15.3(v) unless the receiver scans frequencies outside of the licensed operating frequencies, e.g., outside of the bands allocated to the Amateur Radio Service. The revised definition continues to exempt cellular telephones used in the licensed Cellular Service. In addition, the scanning receiver definition does not cover manually tuned receivers. We find that manually tuning a receiver to pick up Cellular Service signals is inefficient and cumbersome, and thus such equipment does not pose the same likelihood of being utilized to intercept Cellular Service signals as scanning receivers that automatically tune among more than one frequency.

9. In the *Notice*, the Commission recognized that certain professional test equipment is capable of receiving Cellular Service signals and that there is a legitimate need for such test equipment.¹⁸ Some legitimate uses of test equipment include testing cellular systems and equipment, determining compliance of equipment with FCC technical standards, investigating sources of radio frequency interference, and performing research on the effects of radio frequency radiation exposure. The Commission indicated in the *Notice* that it did not believe that it was the intent of Congress to ban legitimate test equipment from tuning Cellular Service frequencies, and that on a case-by-case basis the Commission has interpreted the rules to permit marketing of professional test equipment that is capable of tuning Cellular Service frequencies.¹⁹ The Commission proposed the following definition

¹⁷ See Reply Comments of Grove Enterprises, Inc., at pages 3-4.

¹⁸ See Notice at para. 17.

¹⁹ *Id*.

of test equipment to codify its current policy of exempting test equipment from the definition of a scanning receiver.²⁰

Test Equipment is defined as equipment that is not marketed or sold to the general public and is used by professional technical personnel in conjunction with the testing of equipment or systems or for scientific investigations.

10. Commenters offered suggestions for modifications to the proposed definition contained in the Notice. ARRL is concerned that the proposed definition will prevent radio amateurs from having access to test equipment and believes that the removal of the word "professional" from the proposed definition will alleviate their concerns.²¹ CTIA proposes that the definition should restrict not only the marketing of test equipment to unauthorized persons, but also restrict the manufacturer or any person or entity that has control or custody of such equipment from making it available to any unauthorized person.²² Tandy encourages the Commission to focus the definition on preventing the manufacture of equipment that may function as a scanning receiver, but is not specifically designed for testing purposes.²³ AWS supports the proposed definition with some modifications to ensure that the test equipment is not marketed, made available or sold to the general public by the manufacturer or any person or entity that has control or custody of such equipment.²⁴ Bell Atlantic Mobile, Inc., ("BAM") is concerned that any test equipment definition will be abused to allow marketing of scanning receivers that receive Cellular Service transmissions.²⁵ BAM believes that if a test equipment definition is adopted it should apply to equipment that (i) is not advertised, marketed or sold to the public, (ii) is used only by professional technical personnel, and (iii) is used only for testing equipment or systems or for scientific investigations. Alternatively, BAM and Uniden encourage the Commission to continue judging test equipment on a case-by-case basis.²⁶

11. We adopt the following definition of test equipment:

Test equipment is defined as equipment that is intended primarily for purposes of performing measurement or scientific investigations. Such equipment includes, but is not limited to, field strength meters, spectrum analyzers, and modulation monitors.

We find that this test equipment definition specifically excludes equipment that is not intended to be covered by the *TDDRA*. This definition takes into account that certain test equipment is sold to the general public, and thus does not restrict or limit the purchase of test equipment to professional

²⁰ *Id*.

²¹ See Comments Of The American Radio Relay League, Incorporated at page 14.

²² See Comments of the Cellular Telecommunications Industry Association at page 8.

²³ See Comments Of Tandy Corporation at pages 8-9.

²⁴ See Comments of AT&T Wireless Services, Inc., at pages 7-8.

²⁵ See Comments of Bell Atlantic Mobile, Inc., at page 3.

²⁶ See Comments of Bell Atlantic Mobile, Inc., at page 3. See Comments of Uniden America Corporation at page 7.

technical personnel. We find that this definition of test equipment is reasonable because it focuses on the functional design of the equipment, rather than the type of user of the equipment. Thus, the definition is sufficiently clear to prevent individuals from marketing scanning receivers that receive Cellular Service transmissions as test equipment. Because we find that certain test equipment is sold to the general public, we do not adopt the changes suggested by CTIA and AWS to restrict the use and control of test equipment to certain parties.

Technical Requirements

- 12. In the *Notice*, the Commission proposed to require that scanning receivers provide at least 38 dB rejection of signals in the Cellular Service frequency bands for any frequency to which the receiver can be tuned.²⁷ Typical radio receivers are designed to tune one desired frequency at a time while rejecting other frequencies. An "image frequency" is an unwanted frequency that can be picked up as a result of the mixing of signals within the tuning circuitry of the receiver. Image frequencies are usually rejected through the use of filtering circuitry.²⁸ Because Cellular Service frequencies are adjacent to frequencies used by other services, some scanning receivers may receive cellular service signals on "image frequencies." The Commission proposed to require that compliance with the 38 dB standard be determined based on a signal to noise (S/N) ratio of 12 dB. In addition, the Commission sought comments on alternative standards and measurement procedures that might be more equitable.²⁹
- 13. Uniden, CEMA, CTIA, Tandy, BAM, Kenwood, Motorola, Jacob Brodsky, John T. Ward support the Commission's proposed 38 dB rejection standard. ARRL does not oppose the proposal, but is concerned that the requirement that receivers on any tunable frequency reject Cellular Service signals by at least 38 dB, referenced to the minimum receiver sensitivity for the tunable frequency, would be more strict than necessary. ARRL indicates that it would be fair to assume a typical receiver sensitivity of 0.5 μ V and reference the 38 dB to that level using a 12 dB SINAD measurement.
- 14. We adopt the *Notice's* proposal to require scanning receivers to provide at least 38 dB rejection of Cellular Service signals for any frequency to which the scanning receiver can be tuned. In addition, we adopt the proposal to require that compliance with the 38 dB rejection standard be determined using a 12 dB SINAD measurement. We agree with ARRL that this rejection level and measurement technique should be sufficient to ensure that scanning receivers do not receive Cellular Services signals on image frequencies. Because the 12 dB SINAD specification is the common measurement normally used in the industry for this type of receiver, manufacturers should have no difficulty making the required measurements.
- 15. In the *Notice*, we also noted our concern that scanning receivers may receive Cellular Service transmissions by direct pick-up through the cabinet.³¹ We therefore proposed to require that

²⁷ See Notice at para. 6.

²⁸ See Notice at Appendix A, for a more detailed explanation of "image frequency."

²⁹ See Notice at para. 7.

³⁰ See Comments of the American Radio Relay League, Incorporated at pages 4-6.

³¹ See Notice at para. 8.

scanning receivers not be able to receive a signal level of 5 mV/m or less in the Cellular Service frequency bands for any tunable frequency.³² CEMA, ARRL, David Alkire Smith, and Jacob Brodsky believe that shielding of the scanning receiver cabinets and circuitry boards to ensure that Cellular Service transmissions are not received by direct pick-up is not feasible and would greatly increase the cost, design time, and manufacturing time of scanning receivers.³³ Uniden believes that it would be good engineering practice to require a signal level of 1 mV/m in lieu of the proposed field strength of 5 mV/m.³⁴

16. We are not adopting the proposal to prevent reception of Cellular Service signals by direct pick-up. We agree with commenters that this proposal would significantly increase the costs of scanning receivers because it would require the use of shielding and other electronic filtering components. While direct pick up of signals can occur through a cabinet, it is unlikely that a scanning receiver would be used in this manner to receive Cellular Service transmissions because it is not possible to tune a specific signal. Thus, we conclude that the potential risk of inadvertent reception of Cellular Service transmissions is not sufficient to justify this increase in manufacturing cost.

Prevention of Scanner Modifications

- 17. In the *Notice*, the Commission proposed to require that scanning receivers be designed so that the tuning and control circuitry is inaccessible and the design be such that any attempt to modify the scanning receiver to receive Cellular Service transmissions will likely render it inoperable.³⁵ One approach described covering the control and tuning circuitry with epoxy or some other substance so that it is not possible to access the electrical circuits or components.³⁶ Another method described encasing the control and tuning circuitry in a metal compartment that can not be removed.³⁷ The Commission indicated that such features would prevent modifications of scanning receivers to receive Cellular Service transmission and would be economical to the manufacturer.³⁸
- 18. CEMA indicates that it sees no other reasonable alternative available to help guard the privacy of cellular telephone conversation and does not oppose this proposal.³⁹ ARRL filed comments objecting to imposing these requirements on Amateur Radio Service communications equipment because it would make the equipment more expensive to purchase and repair and it would preclude Amateur equipment from being modified for use in the Civil Air Patrol and Military Affiliate Radio

³² *Id*.

³³ See Comments of the Consumer Electronics Manufacturers Association at page 2. See Comments of the American Radio Relay League, Incorporated at pages 9-10. See Comments of David Alkire Smith at page 3. See Comments of Jacob Brodsky at page 4.

³⁴ See Comments of Uniden America Corporation at page 4.

³⁵ See Notice at para. 10.

³⁶ *Id*.

³⁷ Id.

³⁸ *Id*.

See Comments of the Consumer Electronics Manufacturers Association at page 3.

System operation.⁴⁰ In addition, ARRL notes that such a requirement would prevent amateur users from modifying equipment for experimental purposes. Tandy urges the Commission to permit scanner manufacturers sufficient latitude within the rules to employ other methods of rendering scanner circuitry inaccessible as those methods become available.⁴¹ Tandy notes that many of the latest illegal modifications of scanning receivers were made to the filtering circuitry, which was not addressed in the Commission's proposed rules.⁴² Kenwood Communications Corporation ("Kenwood") notes that it uses a masked ROM in its microprocessor which incorporates firmware that cannot be modified and, as a result, it believes that sealing circuitry via epoxy or use of non-removable metal compartments is unnecessary.⁴³ Kenwood also notes that if a device uses an EPROM or flash memory, a user could reprogram the firmware.

19. We adopt the proposal to require that scanning receivers be designed so that the tuning and control circuitry is inaccessible and the design must be such that any attempt to modify the scanning receiver circuitry to receive Cellular Service transmissions will likely render the scanning receiver inoperable. In addition, even though the Commission did not specifically propose to include filtering circuitry as being inaccessible, as was done with tuning and control circuitry in the Notice, comments were requested on any manufacturing methods that may be employed to better prevent modification of scanning receivers to receive Cellular Service transmissions.⁴⁴ We agree with Tandy's observation that modification of filtering circuitry should be addressed in this proceeding. As a result, we also include a provision in our rules that requires filtering circuitry to be inaccessible. We find that these actions will make modification of scanning receivers to receive Cellular Service transmissions much more difficult. We wish to emphasize that we have illustrated a few examples that would be deemed acceptable to comply with these provisions. However, we realize that these examples may not represent all means by which a manufacturer may make tuning and control circuitry inaccessible. For example, we believe that Kenwood's use of a masked ROM would satisfy this requirement, provided the microprocessor containing the masked ROM is permanently affixed to the circuit board. We note that Amateur Radio Service receivers can be designed to cover all frequencies except the Cellular Service frequency bands. Further, modifications made to Amateur Radio Service equipment to operate in the Military Affiliate Radio System and the Civil Air Patrol usually involve the transmitter portion of the equipment, and not the receiving portion of the equipment. As such, we do not believe our design requirements will impact the Amateur Radio Service equipment.

Modifications

20. In the *Notice*, the Commission proposed to amend Section 15.121 to prohibit the modification of scanning receivers on a substantial scale to receive Cellular Service frequencies, and to treat such action as new manufacture of such equipment in violation of the Commission's Rules.⁴⁵ In

⁴⁰ See Comments of American Radio Relay League, Incorporated at pages 7-8.

⁴¹ See Comments of Tandy Corporation at page 5.

⁴² *Id.* at page 6.

⁴³ See Reply Comments of Kenwood Communications Corporation at pages 3-4.

⁴⁴ See Notice at para. 10.

⁴⁵ See Notice at para. 11.

addition, the Commission proposed to interpret the phrase "modification of scanning receivers on a substantial scale" to include any entity or organization that modifies scanning receivers as a business or on an ongoing basis.⁴⁶ Further, the Commission noted that any modification of a scanning receiver, regardless of the date of manufacture, to receive Cellular Service transmissions invalidates the equipment certification.⁴⁷

- 21. CTIA supports the Commission's proposal and requests that the first sentence in Section 15.121 be amended to provide that any modification of a scanning receiver to receive transmissions from the Cellular Service frequency bands will be considered to constitute manufacture of such equipment.⁴⁸ AWS supports the Commission proposal, but urges the Commission to go further because it is concerned that the proposed rules apparently exclude individuals, and may be interpreted as a license permitting the modification of a scanning receiver to receive Cellular signals.⁴⁹ Grove opposes CTIA's proposal to modify the definition of "manufacturing" so that it applies to a single act by one person.⁵⁰ Grove believes that such a change is unduly and unnecessarily restrictive and punitive, and subverts the meaning of manufacturing.
- 22. We modify section 15.121 to clearly prohibit the modification of scanning receivers to receive Cellular Service transmissions, regardless of the date of manufacture or number of units modified. The Commission's rules specify that any modification of a scanning receiver that changes its operating characteristics voids the equipment certification.⁵¹ We find that modifying a scanning receiver to receive Cellular Service signals changes its operating characteristics, invalidates the equipment certification, and results in equipment that does not comply with the Commission's rules or the Congressional intent as expressed in the *TDDRA*.
- 23. Further, we modify the rules to clarify that the prohibition on modifying scanning receivers to receive Cellular Service transmissions contained in Section 15.121 overrides the home built device provisions of Section 15.23.⁵² The Commission indicated in the *Notice* that the regulations governing scanning receivers needed to be strengthened and expanded to ensure that the objectives of our rules are not thwarted.⁵³ We find that this clarification is necessary to prevent individuals from modifying scanning receivers to receive Cellular Service transmissions and claiming the provisions of Section 15.23 as justification for their actions.

⁴⁶ *Id*.

⁴⁷ See Notice at para. 12.

⁴⁸ See Comments of The Cellular Telecommunications Industry Association at pages 2-5.

⁴⁹ See Comments of AT&T Wireless Services, Inc., at pages 3-6.

⁵⁰ See Reply Comments of Grove Enterprises, Inc., at page 4.

⁵¹ See 47 CFR § 2.1043(b)(3).

⁵² See 47 CFR § 15.23. Section 15.23, in part, provides that equipment authorization is not required for devices that are not marketed, are not constructed from a kit, and are built in quantities of five or less for personal use.

⁵³ See Notice at para. 4.

Manufacture of Equipment in Violation of Section 705 of the Communications Act

- 24. In the *Notice*, the Commission proposed to place into the rules the prohibitions contained in Section 705(e)(4) of the Communications Act.⁵⁴ Section 705(e)(4) makes it unlawful for any person to manufacture, assemble, modify, import, export, sell, or distribute any electronic, mechanical, or other device or equipment that is intended for reception and divulgence or beneficial use of radio communications; provides for penalties of up to \$500,000 for each violation of this provision of the Act; and, provides for enforcement on a case-by-case basis.⁵⁵ In addition, the Commission noted that Section 705 generally prohibits the reception of radio communication and the divulgence or beneficial use of radio communications.⁵⁶ Further, the Commission noted that the Communications Act does not prohibit the mere interception of radio communications.⁵⁷ However, the United States Criminal Code prohibits the intentional interception of electronic communications.⁵⁸ The United States Criminal Code does provide exceptions to this prohibition for law enforcement purposes.⁵⁹
- 25. We do not adopt the proposal to incorporate the manufacturing prohibition contained in Section 705(e)(4) of the Communications Act into our rules. Specifically, Section 705(e)(4) of the Communications Act requires that any person who manufactures equipment must know or have reason to know that the equipment is primarily of assistance in the interception of Cellular Service transmissions. However, the manufacturing prohibitions contained in the new Section 15.121(d) adopted today do not require that the person or persons modifying scanning receivers to receive Cellular Service transmissions know or have reason to know that the modified equipment would be primarily of assistance in the interception of Cellular Service transmissions. Thus, we find that the manufacturing prohibitions we are adopting in Section 15.121(d) regarding the modification of scanning receivers to receive Cellular Service transmissions more adequately addresses the manufacturing prohibition than Section 705(e)(4) of the Communications Act.
- 26. CTIA believes that the Commission's rules should be amended to require labeling on scanning receivers that reflects the prohibitions contained in Section 705 of the Communications Act so that the public is made aware of this provision.⁶⁰ AWS also proposed that the Commission require that all scanners manufactured after the effective date of any new rules and submitted for equipment authorization contain a label clearly "warning" that modification of the scanning receiver to receive protected frequencies is both a violation of the Commission's Rules and Federal law.⁶¹ AWS believes

⁵⁴ See Notice at para. 20.

⁵⁵ See 47 U.S.C. § 605(e)(4).

⁵⁶ See Notice at para. 19.

⁵⁷ *Id*.

⁵⁸ See 18 USC § 2511.

⁵⁹ See 18 USC § 2511 (2)(b) and (2)(e).

⁶⁰ See Comments of The Cellular Telecommunications Industry Association at page 10.

⁶¹ See Comments of AT&T Wireless Services, Inc., at page 3.

that this would be a deterrent to persons inclined to modify scanning receivers to receive Cellular Service transmissions.

27. We find that adopting the labelling requirement is an effective deterrent and is an expedient way to distribute information regarding Commission rules and Federal laws. The Commission indicated in the *Notice* that the regulations governing scanning receivers needed to be strengthened and expanded to ensure that the objectives of our rules are not thwarted.⁶² We adopt a labeling requirement for all scanning receivers manufactured after the effective date of these rule changes. We do not believe that the label should restate the language contained in Section 705 because it may be confusing to consumers and any person who may be inclined to modify scanning receivers. Instead we determine that the label should clearly state that modification of a scanning receiver to receive Cellular Service transmissions is prohibited. The label will be required to be permanently affixed to the cabinet of the scanning receiver and to contain the following wording:

WARNING: MODIFICATION OF THIS DEVICE TO RECEIVE CELLULAR RADIOTELEPHONE SERVICE SIGNALS IS PROHIBITED UNDER FCC RULES AND FEDERAL LAW.

We find that this concisely worded warning label will provide an effective means to distribute relevant information to any person who may be inclined to modify scanning receivers to receive Cellular Service signals.

Information Required for Equipment Authorization Applications

- 28. In the *Notice*, the Commission proposed to require that any application for a scanning receiver include information stating what steps the applicant has taken to comply with the proposed rules.⁶³ Specifically, the Commission proposed to require that any application for certification of a scanning receiver include a detailed showing: describing the testing method used to determine compliance with any rejection ratio the Commission may adopt, such as the 38 dB ratio; assessing the vulnerability of the scanning receiver to possible modification; describing the design features that prevent modification of the scanning receiver to receive Cellular Service transmissions; and describing the design factors that make the tuning and control circuitry inaccessible.⁶⁴
- 29. Uniden supports the Commission's proposal to require any application for certification of a scanning receiver to include information to ensure that the Commission's proposed requirements will be met.⁶⁵ Kenwood Communications Corporation indicates that the inclusion of the description of the testing method used to determine compliance with the image rejection requirement would add minimal cost and would not appear to be a problem to include.⁶⁶

⁶² See Notice at para. 4.

⁶³ See Notice at para. 13.

⁶⁴ Id.

⁶⁵ See Comments of Uniden America Corporation at pages 5-6.

⁶⁶ See Reply Comments of Kenwood Communications Corporation at page 4.

- 30. We adopt the proposed requirements that information must be submitted with any application for certification of a scanning receiver to ensure that the proposed rule changes are satisfied. As a result, any application for certification of a scanning receiver must include a detailed showing which: (1) describes the testing method used to determine compliance with the 38 dB rejection ratio; (2) contains a statement assessing the vulnerability of the scanning receiver to possible modification; (3) describes the design features that prevent modification of the scanning receiver to receive Cellular Service transmissions; and (4) describes the design steps taken to make tuning, control and filtering circuitry inaccessible. We find that, based upon the record, this information will facilitate processing applications for scanning receivers.
- 31. In the *Notice*, the Commission invited comment on Uniden's proposal that all applications for equipment authorization of a scanning receiver be automatically afforded confidentiality protection, without the need for a special request or payment of an additional filing fee.⁶⁷ The Commission stated in the *Notice* that the rules already provide any applicant with the ability to file a written request to keep confidential information submitted to the Commission that would be privileged under the Freedom of Information Act.⁶⁸ In addition, the Commission noted that the associated filing fee that accompanies the request for confidentiality is necessary to cover the cost of special handling that confidential information requires.⁶⁹
- 32. CEMA understands the basis for Uniden's proposal and notes that if it is the Commission's intention to stop modification of radio scanners to receive Cellular Service signals, it seems logical to deny unscrupulous individuals easy access to the designs of those scanning receivers they seek to modify.⁷⁰ Tandy supports this proposal because it believes that the Commission should make it more difficult for individuals to obtain important technical details of scanning receivers that are set forth in equipment authorization applications.⁷¹ BAM supports the proposal because it would prevent technical information from being obtained by parties seeking to modify scanning receivers and it believes that such action would not impose additional burdens on the Commission.⁷² Uniden urges us to reconsider our initial decision concerning its request.⁷³
- 33. Based upon the comments, we find that it will be useful to keep certain portions of applications for equipment authorization for scanning receivers confidential. Section 0.457(d)(1)(ii) provides that applications for equipment authorization and related material shall generally be made public following the effective date of the grant. We find that any information that would be useful for modification of a scanning receiver to receive Cellular Service transmissions is proprietary commercial information which is generally exempt from the disclosure pursuant to 47 CFR § 0.457(d). This

⁶⁷ See Notice at para. 14.

⁶⁸ *Id*.

⁶⁹ Id.

⁷⁰ See Comments of the Consumer Electronics Manufacturers Association at pages 3-4.

⁷¹ See Comments of Tandy Corporation at pages 6-7.

⁷² See Comments of Bell Atlantic Mobile, Inc., at page 2.

⁷³ See Comments of Uniden America Corporation at page 6.

information includes schematic diagrams, technical narratives describing equipment operation, and design details taken to prevent modification of scanning receivers to receive Cellular Service frequencies. Since it is in the public interest to keep such information confidential, we will modify our rules and grant confidentiality to limited portions of scanning receiver equipment authorization applications without the need for a special request or a filing fee. This will assist in preventing sensitive information regarding the design of scanning receivers from being distributed to the public via Commission filings. We wish to emphasize that we expect manufacturers to treat this information in a similar manner. If manufacturers disclose this information without limitations, we may not continue to protect this information in response to a legitimate request for disclosure.

<u>Kits</u>

- 34. In the *Notice*, the Commission proposed to prohibit the importation and manufacture of scanning receiver and frequency converter kits that are capable of receiving and decoding signals from the Cellular Service frequency bands.⁷⁴
- 35. ARRL is concerned that our proposed ban on kits will limit Amateur station access to needed equipment.⁷⁵ ARRL requests that we either create an exemption for frequency converters used in the Amateur Radio Service or enact a less broad regulation that would allow amateur frequency converters and converter kits to continue to be marketed.
- 36. We adopt the proposal to prohibit the importation and manufacture of scanning receiver and frequency converter kits that are capable of receiving and decoding signals from the Cellular Service frequency bands. We find that this action is the least restrictive necessary to stop the practice of parties marketing kits for devices that, when assembled, will not comply with our rules in order to avoid the Commission's equipment authorization requirements. The Commission noted in the *Notice* that it believes that it was Congress's intent in prohibiting scanning receivers and frequency converters that can tune Cellular Service frequencies to include devices that are in kit form. We note that Amateur Radio Service scanning receivers already cover frequency ranges needed by amateurs and such a prohibition against scanning receiver kits will not impact frequency converter kits used to expand the frequencies covered by amateur equipment.

Effective date

- 37. In the *Notice*, the Commission proposed to make rules effective 90 days from the date of publication in the Federal Register of any Report and Order in this proceeding. The Commission noted that the relatively short time frame was important for prompt action to ensure the privacy of Cellular Service subscribers.⁷⁷
- 38. CEMA, Yaesu Musen Co., Ltd., ("Yaesu"), and Tandy filed comments explaining that the proposed effective date would not provide enough time to design and manufacture equipment that

⁷⁴ See Notice at para. 18.

⁷⁵ See Comments of The American Radio Relay League, Incorporated at pages 12-13.

⁷⁶ See Notice at para. 18.

⁷⁷ See Notice at para. 21.

complies with the proposed new rules and requested that the Commission provide additional time for manufacturers to bring their products into compliance with the new rules.⁷⁸ BAM filed comments urging the Commission to make the proposed rules effective as promptly as possible.⁷⁹

39. These rule changes adopted herein will be effective 30 days from the date of publication of this Report and Order in the Federal Register. Nonetheless, we find, based upon the comments, that additional time is needed for manufacturers to design and bring to market scanning receivers that comply with these new rules. Therefore, we will provide transitional provisions in our rules to allow the acceptance of equipment certification applications for scanning receivers under the current rules for up to ninety days after the publication of this Report and Order in the Federal Register. This should provide sufficient time for manufacturers to obtain certification from the Commission for any scanning receivers currently under development. Further, scanning receivers that comply with the current rules will be permitted to be manufactured or imported into the United States for up to one hundred and eighty days after publication of this Report and Order in the Federal Register. However, equipment manufactured or imported into the United States after one hundred and eighty days from the date of publication of this Report and Order in the Federal Register must comply with the new rules. This should provide adequate time for manufacturers to design and submit to the Commission certification applications for scanning receivers that comply with the rule changes adopted in this Report and Order.

OTHER MATTERS

- 40. The following matters were not raised in the *Notice* in this proceeding, but were submitted to the Commission as comments in response to the *Notice*.
- 41. Michael L. Ardai indicates that analog cell phones broadcast conversations with the same modulation methods as emergency communications and TV audio and the only way to ensure some amount of privacy for cellular telephone conversations is to either encrypt the conversation or to encode it using some means, such as digital technology, that would make it more difficult to decode. Chuck Meyer indicates that analog cellular telephones are inherently insecure and that the Commission should mandate some form of digital security. Tandy believes that privacy of Cellular Service transmissions can never be fully guaranteed without meaningful encryption and that Cellular Service providers should be encouraged to encrypt their transmissions as a way to share in the burden of protecting the privacy of their subscribers. Yaesu also indicates that the Commission should encourage cellular licensees to convert from analog to digital and encryption transmission formats. Yaesu indicates that the Commission should require labeling on cellular telephones that is similar to the labeling on cordless telephones which informs the user that privacy of communications may not be

⁷⁸ See Comments of The Consumer Electronics Manufacturers Association at pages 4-5. See Comments of Yaesu Musen Co., Ltd., at pages 24-26. See comments of Tandy Corporation at pages 9-10.

⁷⁹ See Comments of Bell Atlantic Mobile, Inc., at pages 3-4.

⁸⁰ See Comments of Michael L. Ardai.

⁸¹ See Comments of Chuck Meyer.

⁸² See Comments of Tandy Corporation at page 2.

ensured when using this phone.⁸³ Grove indicates that the Commission should place the burden of privacy on the Cellular Service providers to educate the public on the unsecured operation of analog telephones and to provide cellular telephones with robust encryption.⁸⁴ While we understand the encryption, labeling and educational concerns of these commenters, they fall outside the scope of this proceeding.

- 42. Wayne Blackburn filed comments seeking an exemption for licensed private investigators in the State of Texas for use of a scanning receiver that does not block the Cellular Service frequency bands. Mr. Blackburn indicates that an unblocked scanning receiver would be useful in locating illegal devices for his clients. We note that the only exemptions for purchasing scanning receivers that can tune the Cellular Service frequency bands directly apply to employees of electronic communication service providers who may use this equipment in the normal course of business or to an officer, agent, employee of, or a person under contract with the United States, a State, or political subdivision. We do not believe that a private investigator license from a state qualifies as an eligible entity under 18 U.S.C. 2512(2). Accordingly, we are denying this request.
- 43. KSI is concerned that changes in the scanning receiver definition may have the unintended effect of classifying wireless location products that are not marketed to the general public and are used for locating emergency wireless 911 callers as being scanning receivers and urges us to provide an exemption for wireless location products.⁸⁷ We note that if these devices are used in conjunction with a licensed service, i.e. by a Cellular Service licensee, they are exempt from the definition of a scanning receiver and thus are excluded from the cellular blocking requirements. Similarly, scanning equipment used by law enforcement, fire and rescue departments is exempt under 18 USC 2512(2).
- 44. Yaesu asserts that the Commission's current and proposed rules concerning the privacy of Cellular Service transmissions are a violation of the First Amendment to the United States Constitution.⁸⁸ Yaesu asserts that the primary use of the electromagnetic spectrum is to convey information from one place to another, i.e., to communicate. In support of its argument, Yaesu cites to Reno v ACLU, 117 S.Ct. 2329, 138 L.E.2d 874 (1997), where the Court struck down Title V of the Telecommunications Act of 1996, Pub. L. 104-104, 110 Stat 56, also known as the Communications Decency Act (the "CDA").
- 45. BAM filed reply comments indicating that Yaesu's claim that the proposals are unconstitutional because they would interfere with a purported First Amendment "right to listen" to

⁸³ See Comments of Yaesu Musen Ltd., at page 6.

⁸⁴ See Reply Comments of Grove Enterprises, Inc., at page 2.

⁸⁵ See Comments of Wayne Blackburn.

⁸⁶ See 18 U.S.C. 2512(2).

⁸⁷ See Reply Comments of KSI, Inc.

⁸⁸ See Comments and Reply Comments of Yaesu Musen, Ltd..

cellular calls is frivolous. BAM notes that Yaesu principally relies on *Reno* which is not applicable here because it struck down as vague the content-based blanket prohibition on indecent materials enacted by the CDA. BAM also asserts that the CDA did not attempt to regulate the interception of radio communications. In addition, BAM asserts that the federal courts have consistently held that an individual has no First Amendment right to eavesdrop on a communication simply because it is transmitted over the radio spectrum. *See*, e.g. *Cable/Home Communication Corp. v Network Productions, Inc.*, 902 F.2d 829, 849 (11th Cir. 1990). BAM also notes that surreptitious listening to cellular calls and other wireless communications has long been prohibited by the *Electronic Communications Privacy Act of 1986* (EPCA), 18 U.S.C. § 2511(1)(a), which criminalizes the intentional, unauthorized interception of electronic communication.

- 46. We agree with BAM that the First Amendment issue raised by Yaesu are without merit. The First Amendment clearly does not prohibit the government from taking reasonable steps to assure the privacy of cellular telephone conversations. As BAM notes, Congress and the courts have made it clear that the privacy of communication may be protected whether those communications are transmitted over wire, by radio, or indeed simply oral. See, e.g., U.S. v D'Aguila, 719 F.2d 98 (D. Conn. 1989).
- 47. In addition, Yaesu asserts that the proposed rules pose significant environmental risks because if the proposed rules are adopted, scanning receivers will become throwaway items. Yaesu argues that the batteries inside the scanning receivers would pose a serious environmental threat. As a result, Yaesu alleges that the Commission did not follow its procedural requirements under the Subchapter I of the National Environmental Policy Act of 1969, as amended, 52 U.S.C. § 4321 et seq., which requires the Commission to consider potential environmental consequences of its actions.
- 48. We find that the environmental issues raised by Yaesu are also without merit. We note that none of our existing or proposed rules require that scanning receivers be treated as disposable or throwaway devices. Moreover, none of our current or proposed rules require that the batteries contained in portable scanning receivers be disposed of improperly or in such a way as to cause harm to the environment.

PROCEDURAL MATTERS

- 49. IT IS ORDERED that Parts 2 and 15 of the Commission's Rules and Regulations ARE AMENDED as specified in Appendix A, effective June 1, 1999. Authority for issuance of this Report and Order is contained in Section 4(i), 301, 302, 303(e), 303(f), 303(g), 303(r), 304, and 307 of the Communications Act of 1934, as amended, 47 U.S.C. Section 154(i), 301, 302, 303(e), 303(f), 303(g), 303(r), 304 and 307. IT IS FURTHER ORDERED that this proceeding is TERMINATED.
- 50. We have conducted a Final Regulatory Flexibility Analysis ("FRFA") for this Report and Order pursuant to the Regulatory Flexibility Act. See 5 U.S.C. § 604. The FRFA is contained in Appendix B. IT IS ORDERED that the Commission's Office of Public Affairs, Reference Operations Division, SHALL SEND a copy of this Report and Order, including the Final Regulatory Flexibility Certification, to the Chief Counsel for Advocacy of the Small Business Administration.

⁸⁹ See Reply Comments of Bell Atlantic Mobile, Inc.

⁹⁰ The Electronic Communication Privacy Act, 18 USC § 2511(1)(a) prohibits the intentional interception of any wire, oral or electronic communication.

51. For further information regarding this report and Order, contact Rodney Conway at (202) 418-2904, via e-mail rconway@fcc.gov or via TTY (202) 418-2989, Office of Engineering and Technology, Federal Communications Commission, Washington DC 20554.

FEDERAL COMMUNICATIONS COMMISSION

Magalie Roman Salas

Secretary

APPENDIX A

List of Commenters

Comments

American Radio Relay League, Incorporated ("ARRL")

Michael L. Ardai

AT&T Wireless Services, Inc. ("AWS")

Bell Atlantic Mobile, Inc. ("BAM")

Wayne Blackburn

Jacob Brodsky

The Cellular Telecommunications Industry Association ("CTIA")

Consumer Electronics Manufacturers Association ("CEMA")

Marlboro Youth Repeater League

Chuck Meyer

David Alkire Smith

Tandy Corporation ("Tandy")

Uniden America Corporation ("Uniden")

John T. Ward

Kenneth Woo

Yaesu Musen Co., Ltd. ("Yaesu")

Reply Comments

Bell Atlantic Mobile, Inc. ("BAM")

Richard E. Frost

Grove Enterprises, Inc. ("Grove")

Hill & Welch

Kenwood Communications Corporation ("Kenwood")

KSI, Inc. ("KSI")

Motorola

Tandy Corporation ("Tandy")

Yaesu Musen Co., Ltd. ("Yaesu")

APPENDIX B

FINAL REGULATORY FLEXIBILITY ANALYSIS FOR REPORT AND ORDER

As required by the Regulatory Flexibility Act (RFA),⁹¹ an Initial Regulatory Flexibility Analysis (IRFA) was incorporated into the Notice of Proposed Rule Making in ET Docket 98-76.⁹² The Commission sought written public comments on the proposals in the *Notice*, including the IRFA. The Final Regulatory Flexibility Analysis ("FRFA") in this Report and Order conforms to the RFA.⁹³

Need for and Objective of this Report and Order. These rules seek to ensure that scanning receivers do not receive signals from the cellular radiotelephone service frequency bands.

Summary of Significant Issues raised by Public Comments in Response to the IRFA. No comments were filed in response to the IRFA.

Description and Estimate of the Number of Small Entities to Which the Rules Will Apply. For purposes of this Report and Order, the RFA defines a "small business" to be the same as a "small business concern" under the Small Business Act, 15 U.S.C. § 632, unless the Commission has developed one or more definitions that are appropriate to its activities. Under the Small Business Act, a "small business concern" is one that: 1) is independently owned and operated; 2) is not dominant in its field of operation; and 3) meets any additional criteria established by the Small Business Administration ("SBA"). 95

The Commission has not developed a definition of small entities applicable to unlicensed communications devices. Therefore, we will utilize the SBA definition applicable to manufacturers of Radio and Television Broadcasting and Communications Equipment. According to the SBA regulations, unlicensed transmitter manufacturers must have 750 or fewer employees on order to qualify as a small business concern. 6 Census Bureau data indicates that there are 858 U.S. companies that manufacture radio and television broadcasting and communications equipment, and that 778 of these firms have fewer than 750 employees and would be classified as small entities. 7 The Census Bureau category is very broad, and specific figures are not available as to how many of these firms

See 5 U.S.C. § 603. The RFA, see 5 U.S.C. § 601 et.seq., has been amended by the Contract With America Advancement Act of 1996, Pub. L No. 104-121, 110 Stat. 847 (1996) (CWAAA). Title II of the CWAAA is the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA).

⁹² See 13 FCC Rcd 12937 (1998).

⁹³ See 5 U.S.C. § 604.

See 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in 5 U.S.C. § 632).

⁹⁵ See 15 U.S.C. § 632.

⁹⁶ See 13 C.F.R. § 121.201, (SIC) Code 3663.

⁹⁷ See U.S. Dept. of Commerce, 1992 Census of Transportation, Communications and Utilities (issued May 1995), SIC category 3663.

will manufacture unlicensed communications devices. However, we believe that many of them may qualify as small entities.

Description of Projected Reporting, Recordkeeping and Other Compliance Requirements. These rules require scanning receivers to be manufactured to reduce the possibility of receiving signals from the cellular radiotelephone service frequency bands. The rules will require design details and test measurements to be reported to the Commission as part of the normal equipment authorization process under our certification procedure.

Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered. The Commission considered and rejected additional rules that would have significantly increased the costs of manufacturing scanning receivers. The rules adopted in this Report and Order represent the most efficient and least restrictive method to accomplish the Commission's policies and objectives.

Report to Congress. The Commission will send a copy of the Report and Order, including this FRFA, in a report to be sent to Congress pursuant to the Small Business Regulatory Enforcement Fairness Act of 1996, see 5 U.S.C. § 801(a)(1)(A). In addition, the Commission will send a copy of the Report and Order, including FRFA, to the Chief Counsel for Advocacy of the Small Business Administration. A copy of the Report and Order and FRFA (or summaries thereof) will also be published in the Federal Register. See 5 U.S.C. § 604(b).

APPENDIX C

Part 0 of Title 47 of the Code of Federal Regulations is amended as follows:

PART 0--COMMISSION ORGANIZATION

1. The authority citation for Part 0 continues to read as follows:

AUTHORITY: Sec. 5, 48 Stat. 1068, as amended; 47 U.S.C. 155.

- 2. Section 0.457 paragraph (d)(1)(ii) is revised to read as follows:
- (d) * * *
- (1) * * *
- (ii) Applications for equipment authorizations (type acceptance, type approval, certification, or advance approval of subscription television systems), and materials relating to such applications, are not routinely available for public inspection prior to the effective date of the authorization. The effective date of the authorization will, upon request, be deferred to a date no earlier than that specified by the applicant. Following the effective date of the authorization, the application and related materials (including technical specifications and test measurements) will be made available for inspection upon request (See § 0.460). Portions of applications for equipment certification of scanning receivers and related materials will not be made available for inspection. This information includes that necessary to prevent modification of scanning receivers to receive Cellular Service frequencies, such as schematic diagrams, technical narratives describing equipment operation, and relevant design details.

Part 2 of Title 47 of the Code of Federal Regulations is amended as follows:

PART 2--FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS: GENERAL RULES AND REGULATIONS

1. The authority citation for Part 2 continues to read as follows:

AUTHORITY: Sec. 4, 302, 303 and 307 of the Communications Act of 1934, as amended, 47 U.S.C. 154, 154(i), 302, 303, 303(r) and 307.

2. Section 2.1033 paragraph (b)(11) is revised to read as follows:

Section 2.1033 Application for certification.

- (b) * * *
- (11) Applications for the certification of scanning receivers shall include a statement describing the methods used to comply with the design requirements of all parts of Section 15.121 of this chapter. The application must specifically include a statement assessing the vulnerability of the equipment to possible modification and describing the design features that prevent the modification of

the equipment by the user to receive transmissions from the Cellular Radiotelephone Service. The application must also demonstrate compliance with the signal rejection requirement of Section 15.121 of this chapter, including details on the measurement procedures used to demonstrate compliance.

Part 15 of Title 47 of the Code of Federal Regulations is amended as follows:

PART 15--RADIO FREQUENCY DEVICES

1. The authority citation for Part 15 continues to read as follows:

AUTHORITY: 47 U.S.C. 154, 302, 303, 304, 307 and 544A.

2. Section 15.3 is amended by revising paragraph (v) and adding paragraph (dd)

Section 15.3 Definitions

(v) Scanning receiver. For the purpose of this part, this is a receiver that automatically switches among two or more frequencies in the range of 30 to 960 MHz and that is capable of stopping at and receiving a radio signal detected on a frequency. Receivers designed solely for the reception of the broadcast signals under part 73 of this chapter or for operation as part of a licensed station are not included in this definition.

(dd) Test Equipment is defined as equipment that is intended primarily for purposes of performing measurements or scientific investigations. Such equipment includes, but is not limited to, field strength meters, spectrum analyzers, and modulation monitors.

Section 15.37 is amended by modifying paragraph (f) and adding paragraph (h) as follows:

3. Section 15.37 is amended by modifying paragraph (f) and adding a new paragraph (h) to read as follows:

Section 15.37 <u>Transition provisions for compliance with the rules</u>.

(f) The manufacture or importation of scanning receivers, and frequency converters designed or marketed for use with scanning receivers, that do not comply with the provisions of § 15.121(a)(1) shall cease on or before April 26, 1994. Effective April 26, 1993, the Commission will not grant equipment authorization for receivers that do not comply with the provisions of § 15.121(a)(1). This paragraph does not prohibit the sale or use of authorized receivers manufactured in the United States, or imported into the United States, prior to April 26, 1994.

(g) * * *

- (h) The manufacture or importation of scanning receivers, and frequency converters designed or marketed for use with scanning receivers, that do not comply with the provisions of § 15.121 shall cease on or before [insert 180 days after publication of the Report and Order in the Federal Register]. Effective [insert ninety days after publication of the Report and Order in the Federal Register] the Commission will not grant equipment authorization for receivers that do not comply with the provisions of § 15.121. This paragraph does not prohibit the sale or use of authorized receivers manufactured in the United States, or imported into the United States, prior to [insert 180 days after publication of the Report and Order in the Federal Register].
- 4. Section 15.121 is amended by modifying paragraph (a), redesignating paragraph (b) as (c), modifying paragraph (c) and adding a new paragraphs (b), (d), (e) and (f) to read as follows:

Section 15.121 Scanning receivers and frequency converters used with scanning receivers.

- (a) Except as provided in paragraph (c) of this section, scanning receivers and frequency converters designed or marketed for use with scanning receivers, shall:
- (1) Be incapable of operating (tuning), or readily being altered by the user to operate, within the frequency bands allocated to the Cellular Radiotelephone Service in Part 22 of this chapter (cellular telephone bands). Scanning receivers capable of "readily being altered by the user" include, but are not limited to, those for which the ability to receive transmissions in the cellular telephone bands can be added by clipping the leads of, or installing, a simple component such as a diode, resistor or jumper wire; replacing a plug-in semiconductor chip; or programming a semiconductor chip using special access codes or an external device, such as a personal computer. Scanning receivers, and frequency converters designed for use with scanning receivers, also shall be incapable of converting digital cellular communication transmissions to analog voice audio.
- (2) Be designed so that the tuning, control and filtering circuitry is inaccessible. The design must be such that any attempts to modify the equipment to receive transmissions from the Cellular Radiotelephone Service likely will render the receiver inoperable.
- (b) Except as provided in paragraph (c) of this section, scanning receivers shall reject any signals from the Cellular Radiotelephone Service frequency bands that are 38 dB or higher based upon a 12 dB SINAD measurement, which is considered the threshold where a signal can be clearly discerned from any interference that may be present.
- (c) Scanning receivers and frequency converters designed or marketed for use with scanning receivers, are not subject to the requirements of paragraphs (a) and (b) of this section provided that they are manufactured exclusively for, and marketed exclusively to, entities described in 18 U.S.C. Section 2512(2), or are marketed exclusively as test equipment pursuant to § 15.3(dd).
- (d) Modification of a scanning receiver to receive transmissions from Cellular Radiotelephone Service frequency bands will be considered to constitute manufacture of such equipment. This includes any individual, individuals, entity or organization that modifies one or more scanners. Any modification to a scanning receiver to receive transmissions from the Cellular Radiotelephone Service frequency bands voids the certification of the scanning receiver, regardless of the date of manufacture

of the original unit. In addition, the provisions of § 15.23 shall not be interpreted as permitting modification of a scanning receiver to receiver Cellular Radiotelephone Service transmissions.

- (e) Scanning receivers and frequency converters designed for use with scanning receivers shall not be assembled from kits or marketed in kit form unless they comply with the requirements in paragraph (a) through (c) of this section.
- (f) Scanning receivers shall have a label permanently affixed to the product, and this label shall be readily visible to the purchaser at the time of purchase. The label shall read as follows:

WARNING: MODIFICATION OF THIS DEVICE TO RECEIVE CELLULAR RADIOTELEPHONE SERVICE SIGNALS IS PROHIBITED UNDER FCC RULES AND FEDERAL LAW.

"Permanently affixed" means that the label is etched, engraved, stamped, silkscreened, indelibly printed or otherwise permanently marked on a permanently attached part of the equipment or on a nameplate of metal plastic or other material fastened to the equipment by welding, riveting, or permanent adhesive. The label shall be designed to last the expected lifetime of the equipment in the environment in which the equipment may be operated and must not be readily detachable. The label shall not be a stick-on, paper label.